

WHAT IS CLAIMED IS:

1. ~~An injecting and sealing apparatus of a liquid crystal display device comprising:~~
an elevator conveying a liquid crystal display panel having a liquid crystal injection hole
from the injecting apparatus to the sealing apparatus;
a residual liquid crystal remover removing contaminated liquid crystal at a periphery
of the liquid crystal injection hole;
a sealer sealing the liquid crystal injection hole with a sealant; and
an ultraviolet irradiating unit hardening the sealant.
2. The apparatus of claim 1, further comprising at least one buffer buffering a time difference
between the injecting apparatus and the sealing apparatus.
3. The apparatus of claim 1, further comprising a seal-confirming unit confirming a seal state
of the liquid crystal display panel.
4. The apparatus of claim 1, wherein the injecting apparatus includes:
a loader loading the liquid crystal display panel;
a pre-heater heating the liquid crystal display panel;
a vacuum unit causing an interior of the liquid crystal display panel to be in a vacuum
state; and
an injector injecting liquid crystal into the liquid crystal display panel.
5. The apparatus of claim 4, wherein the pre-heater includes:
a first pre-heater activating contaminants of the liquid crystal; and
a second pre-heater heating the liquid crystal display panel.
6. The apparatus of claim 4, wherein the injector includes;
a first injector placing the liquid crystal display panel in an atmospheric state; and
a second injector injecting liquid crystal into the liquid crystal display panel.

7. The apparatus of claim 1, wherein the residual liquid crystal remover includes:
a liquid crystal removing unit removing the contaminated liquid crystal; and
a vacuum line evacuating the contaminated liquid crystal.
8. The apparatus of claim 7, wherein the vacuum line is provided at a rear side of the liquid crystal removing unit.
9. The apparatus of claim 1, wherein the sealer includes:
a roller sealing the liquid crystal injection hole;
a sealant box filled with a sealant; and
a leveler maintaining a thickness of the sealant.
10. A method of injecting and sealing a liquid crystal display panel comprising:
conveying a plurality of liquid crystal display panels from an injecting apparatus to a sealing apparatus; and
sealing and hardening liquid crystal injection holes of the liquid crystal display panels using a roller.
11. The method of claim 10, wherein said sealing includes sealing the injection holes in a downward state.
12. The method of claim 10, wherein the injecting apparatus includes:
a loader loading the liquid crystal display panel;
a pre-heater heating the liquid crystal display panel;
a vacuum unit causing an interior of the liquid crystal display panel to be in a vacuum state; and
an injector injecting liquid crystal into the liquid crystal display panel.
13. The method of claim 10, wherein the sealing apparatus includes:
a buffer buffering a time difference between the injecting apparatus and the sealing

apparatus;

a residual liquid crystal remover removing contaminated liquid crystal at a periphery of the liquid crystal injection hole;

a sealer sealing the liquid crystal injection hole with a sealant; and
an ultraviolet irradiating unit hardening the sealant.

14. The method of claim 13, wherein the contaminated liquid crystal is removed by an N₂ blow system.

15. The method of claim 13, wherein the contaminated liquid crystal is removed by a vacuum system.

16. The method of claim 10, wherein said hardening includes irradiating an ultraviolet ray by a lamp scanning system.

17. The method of claim 16, wherein the liquid crystal injection holes collectively harden by the lamp scanning system.

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